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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Christina Zech

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BACHMAN & LAPOINTE, P.C.  
900 CHAPEL STREET  
SUITE 1201  
NEW HAVEN, CT 06510

EXAMINER

SASAN, ARADHANA

ART UNIT

PAPER NUMBER

1615

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/509,193	<b>Applicant(s)</b> ZECH, CHRISTINA	
	<b>Examiner</b> ARADHANA SASAN	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-49 is/are pending in the application.
- 4a) Of the above claim(s) 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/18/05, 8/11/06, 7/6/08</u> .                                | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Restriction Response***

1. Applicant's election without traverse of Group I (claims 25-48) in the reply filed on 07/06/08 is acknowledged.
2. Claim 49 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.
3. Claims 25-48 are included in the prosecution.

***Priority***

4. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

***Information Disclosure Statement***

5. The information disclosure statements (IDS) submitted on 04/18/05, 08/11/06 and 07/06/08 are acknowledged. The submissions are in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the examiner is considering the information disclosure statements.

See attached copy of PTO-1449.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 46 recites the limitation of "comprising a keratinic material". The Specification discloses coloring keratinic fibers, providing keratinic material with a coating, or application to a keratinic material (Substitute Specification, Page 15, [0045], Page 22, [0068], Page 23, [0070] – [0072], Page 25, [0076]). It is unclear if the composition further comprises keratin material or the composition is applied to keratinic material.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 25-28, 31-32, 37-42, 44-45 and 47-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Ramin (US 5,833,967).

The claimed invention is an aqueous-based preparation for application to the skin or skin appendages comprising a mixture of at least two aqueous dispersions of film-forming polymers. One dispersion is a polyurethane-based polymer. The other dispersion is an acrylic-based polymer. The preparation has a viscosity in the range of between 0.02 and 3.8 Pa·s measured at 25°C and with 200 s<sup>-1</sup>.

Ramin teaches a composition comprising film forming materials chosen from acrylic resins and polyurethanes (Col. 2, lines 15-19). Ramin discloses particles of film-forming polymer dispersed in an aqueous medium (Col. 2, lines 39-41). Polyester-polyurethanes, polyether-polyurethanes, acrylic, and acrylic styrene polymers are disclosed (Col. 2, lines 42-47). Examples 4 and 5 disclose a dispersion of acrylic polymer (40% solids content) at 38% by weight of the composition and a dispersion of polyurethane (30% solids content) at 50% by weight of the composition (Col. 5, line 45 to Col. 6, line 5). The composition may comprise plasticizers (Col. 2, line 29), wetting agents, antifoaming agents, preserving agents, pigments (Col. 3, lines 49-59). Rheological agents such as cellulose derivatives, and gums such as guar, carob and xanthan are disclosed (Col. 2, lines 35-38). Example 4 contains silicic acid (which is a mineral thickener) at 0.7% by weight of the composition (Col. 5, lines 45-55). The composition may be in the form of a nail varnish, a hair product or a mascara (Col. 1, lines 10-12) and can be used to reinforce keratin substances such as nails, hair and eyelashes (Col. 1, lines 58-61).

Regarding instant claim 25, the limitation of the viscosity of the preparation is anticipated by the compositions taught by Ramin (Col. 5, line 45 to Col. 6, line 5) because a composition with the two aqueous dispersions (of polyurethane and acrylic based polymer) will inherently have a viscosity in the range of between 0.02 and 3.8 Pa.s measured at 25°C and with 200 s<sup>-1</sup>. A chemical composition and its properties are inseparable (MPEP 2112.01). Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present.

Therefore, the limitations of claims 25-28, 31-32, 37-42, 44-45 and 47-48 are anticipated by the teachings of Ramin.

10. Claims 25-32 and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by de la Poterie et al. (US 6,267,950 B1).

de la Poterie teaches a composition comprising an aqueous dispersion of film-forming polymer particles comprising a polyurethane (Col. 1, lines 39-45). The viscosity of the composition is at least 2 Pa.s., measured at 23°C at a rotation rate of 100 rpm (Col. 2, lines 26-43). The film forming polymers includes free-radical film-forming polymers obtained by polymerization of unsaturated monomers, in particular ethylenic monomers, including acrylic polymers, monomers containing an acid group such as  $\alpha,\beta$ -ethylenic carboxylic acids such as acrylic acid, methacrylic acid, crotonic acid, maleic acid and itaconic acid (Col. 3, lines 32-57). Aryl and alkyl methacrylates are disclosed (Col. 4, lines 5-8). Styrene monomers are also disclosed (Col. 4, lines 28-29). de la Poterie teaches that it is possible to use any monomer which is known to the skilled person which falls into the categories of acrylic monomers (Col. 4, lines 30-34). Polyurethanes, polyurethane-polyvinylpyrrolidones, polyester-polyurethanes and polyether-polyurethanes are disclosed (Col. 4, lines 42-47). The "aqueous dispersion of film-forming polymer particles which can be used is an aqueous dispersion of an anionic polyester-polyurethane wherein the polyurethane particle size is in the range 2 to 100 nanometers" (Col. 5, lines 3-6). Additives to the composition include colorants, pigments, preserving agents (Col. 6, lines 46-51). Example 1 discloses a composition with an aqueous dispersion of anionic polyester-polyurethane at 47% by weight of the composition (47g/100g), and an aqueous dispersion of acrylate copolymer at 15% by

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weight of the composition (15g/100g) (Col. 7, lines 1-15). Therefore, both aqueous dispersions are 62% (47% + 15%) by weight of the composition. Examples 2-8 also disclose compositions with an aqueous dispersion of a polyester-polyurethane and an aqueous dispersion of an acrylate copolymer (Col. 7, line 40 to Col. 8, line 15).

Regarding instant claim 25, the limitation of the viscosity of the preparation is anticipated by the compositions taught by de la Poterie (Col. 7, lines 1-15) because a composition with the two aqueous dispersions (of polyurethane and acrylic based polymer) will inherently have a viscosity in the range of between 0.02 and 3.8 Pa·s measured at 25°C and with 200 s<sup>-1</sup>. Moreover, de la Poterie teaches that the viscosity of the composition is at least 2 Pa·s., measured at 23°C at a rotation rate of 100 rpm (Col. 2, lines 26-43).

A chemical composition and its properties are inseparable (MPEP 2112.01). Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present.

Therefore, the limitations of claims 25-32 and 37-38 are anticipated by the teachings of de la Poterie.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramin (US 5,833,967).

The teaching of Ramin with respect to cellulose derivatives, xanthan and silicic acid is stated above.

Ramin does not expressly teach a preparation with cellulose, silicate and xanthane gum in a ratio of between 1:1:4 and 1:2:6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a composition with an aqueous dispersion of polyurethane and an aqueous dispersion of acrylic polymer, as suggested by Ramin, modify the ratio of the thickeners cellulose derivatives, xanthan and silicic acid during the process of routine experimentation, and produce the instant invention.

One of ordinary skill in the art would have done this because the ratio of the thickeners is a modifiable parameter and can be varied during the process of routine experimentation. The recited ratio of thickeners would have been an obvious variant unless there is evidence of criticality or unexpected results.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Regarding instant claim 43, the limitation of cellulose, silicate and xanthane gum in a ratio of between 1:1:4 and 1:2:6 would have been obvious over the cellulose derivatives, xanthan and silicic acid taught by Ramin (Col. 2, lines 35-38 and Col. 5, lines 45-55).

13. Claims 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Poterie et al. (US 6,267,950 B1).

The teaching of de la Poterie with respect to the polyurethane particle size in the range 2 to 100 nanometers is stated above (Col. 5, lines 3-6).

de la Poterie does not expressly teach the particle size of between 10 and 1000nm of the polymers that are present in the dispersions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a composition with an aqueous dispersion of polyurethane in which the particle size of the polyurethane was 2 to 100 nm, as suggested by de la

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Poterie, modify the particle size of the polyurethane in the aqueous dispersion during the process of routine experimentation, and produce the instant invention.

One of ordinary skill in the art would have done this because the particle size of the polyurethane or the acrylic polymer are modifiable parameters and can be varied during the process of routine experimentation. The recited particle size range would have been an obvious variant unless there is evidence of criticality or unexpected results.

Regarding instant claim 33, the limitation of the particle size would have been obvious over the particle size of the polyurethane in the aqueous dispersion taught by de la Poterie (Col. 5, lines 3-6).

Regarding instant claims 34-36, the limitation of the polymers in the dispersion with film-forming temperatures of below 30°C, the limitation of at least 30% by wt. of the polymers that are water resistant in the dried condition and have a glass transition temperature of below 10 °C, and the limitation of between 5 and 30% by wt. of one or more of the dispersions having a block or portion whose glass transition temperature in the dried condition is higher than 30°C, would have been obvious over the polymers in the aqueous dispersions taught by de la Poterie (Col. 7, lines 1-15). The film forming temperature and glass transition temperature are intrinsic properties of the polymer. A chemical composition and its properties are inseparable (MPEP 2112.01). Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present.

14. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over de la Poterie et al. (US 6,267,950 B1) in view of Arraudeau et al. (US 5,053,220).

The teaching of de la Poterie is stated above.

de la Poterie does not expressly teach a preparation comprising a keratinic material.

Arraudeau teaches a mascara composition with keratin derivatives (Abstract).



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It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a composition with an aqueous dispersion of polyurethane and an aqueous dispersion of acrylate, as suggested by de la Poterie, combine it with the mascara composition comprising keratin, as taught by Arraudeau, and produce the instant invention.

One of ordinary skill in the art would have done this because Arraudeau teaches that when keratin derivatives are added to mascaras, the cosmetic qualities of the mascaras improve (Abstract).

Regarding instant claim 46, the limitation of the preparation comprising a keratinic material would have been obvious over the preparation taught by de la Poterie (Col. 7, lines 1-15), in view of the mascara composition with keratin derivatives taught by Arraudeau (Abstract).

### ***Conclusion***

15. No claims are allowed.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aradhana Sasan whose telephone number is (571) 272-9022. The examiner can normally be reached Monday to Thursday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Aradhana Sasan/  
Examiner, Art Unit 1615

/MP WOODWARD/  
Supervisory Patent Examiner, Art Unit 1615